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APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,461		10/16/2003	Yoshio Takada	B422-243	8871
26272	7590	09/30/2004		EXAMINER	
COWAN I	LIEBO	WITZ & LATMA	PERKEY, WILLIAM B		
JOHN J TO	RRENT	E			DADED AND OFF
1133 AVE	OF THE	EAMERICAS	ART UNIT	PAPER NUMBER	
1133 AVE	OF THE	E AMERICAS	2851		
NEW YOR	K, NY	10017	DATE MAILED: 09/30/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

		JAK .	_
	Application No.	Applicant(s)	
	10/687,461	TAKADA, YOSHIO	
Office Action Summary	Examiner	Art Unit	
	William B. Perkey	2851	_
The MAILING DATE of this communication Period for Reply	appears on the cover sheet wi	th the correspondence address	
A SHORTENED STATUTORY PERIOD FOR RE THE MAILING DATE OF THIS COMMUNICATIO  - Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a  - If NO period for reply is specified above, the maximum statutory per  - Failure to reply within the set or extended period for reply will, by stany reply received by the Office later than three months after the mearned patent term adjustment. See 37 CFR 1.704(b).	N. R 1.136(a). In no event, however, may a r reply within the statutory minimum of thin itiod will apply and will expire SIX (6) MON atute. cause the application to become AB	eply be timely filed y (30) days will be considered timely. THS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).	
Status			
Responsive to communication(s) filed on _     This action is FINAL. 2b) ☑ ↑      Since this application is in condition for allo closed in accordance with the practice under the condition of the condition of the closed in accordance with the practice.	This action is non-final. wance except for formal matt		
Disposition of Claims		. `	
4) ⊠ Claim(s) <u>1-18</u> is/are pending in the applicat 4a) Of the above claim(s) is/are without 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1-18</u> is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and	drawn from consideration.		
Application Papers			
9) The specification is objected to by the Exam 10) The drawing(s) filed on 16 October 2003 is/s Applicant may not request that any objection to Replacement drawing sheet(s) including the cor 11) The oath or declaration is objected to by the	are: a)⊠ accepted or b)⊡ o the drawing(s) be held in abeyan rection is required if the drawing	ce. See 37 CFR 1.85(a). s) is objected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of:  1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the papplication from the International Bur	ents have been received. ents have been received in A priority documents have been	pplication No	
* See the attached detailed Office action for a	list of the certified copies not	received.	
Attachment(s) ) Notice of References Cited (PTO-892)	A\	ummary (PTO-413)	
<ul> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/Paper No(s)/Mail Date</li> </ul>	Paper No(s	)/Mail Date formal Patent Application (PTO-152)	

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1, 2, 4, 5, 7 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by White (U.S. Patent No. 624,142).

White discloses a rotor 1; first and second bearings 4 which have a tapered shape in order to receive the tapered ends 3 of the rotor 1. Element 5 is a biasing means.

3. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Nakagishi (U.S. Patent No. 6,424,068 B2).

Nakagishi discloses a rotor 50; a first bearing 51 and a second bearing 52. Both bearings have a tapered shape. See the first example Figs. 7-12. The embodiment in Fig. 13 shows a biasing means applying pressure to the bearing. Fig. 23 shows a semi-spherical shape at the contact end of bearing 101. Fig. 24 shows a reversal of parts for the upper bearing as compared to that in Fig. 23. Fig. 26 shows a reversal of the bearing parts from that of Fig. 9. Figs. 28 and 29 disclose a reversal of the coils and permanent magnets from the previous embodiments.

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 8-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the acknowledged Prior Art disclosed in applicants Figs. 6A and 6B in view of Nakagishi (U.S. Patent No. 6,424,068 B2).

Prior Art Fig. 6B discloses a rotor 102; a first bearing 101a; and second bearing 104a. The lever 102 is connected to a not shown light quantity adjusting device. The Fig. also discloses a Hall element to detect the position of the rotor. The acknowledged prior art discloses the claimed invention, except for the first bearing having a tapered shape. Nakagishi discloses a motor device for controlling a device that requires high stability. Tapered and semi-spherical bearings, some embodiments with biasing means for the bearings, are disclosed by Nakagishi to obtain high stability of undesired movements. It would have been obvious to one of ordinary skill in the art to substitute improved bearings of tapered or semi-spherical shape, biased or unbiased, for the bearings of the acknowledged prior art in order to obtain the desirable feature of improved stabilization of the light quantity adjusting means.

### **Telephone Numbers**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William B. Perkey whose telephone number is (571) 272-2126. The examiner can normally be reached on Monday-Thursday 7:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

William B. Perkey Primary Examiner

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WBP:wbp